

Work Order ID 51276

August 13, 2009 10:55:26 AM



Page 1

Item ID: D205-634-041

Accept



Setup Start



Revision ID: D

Stop



Item Name: Replacement Skidtube

Start Date: 8/13/09 Start Qty: 1.00



Cust Item ID:

Required Date: 10/13/09 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: CL

Date: 09/08/13 Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2580

Rev D

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

N/A

D 11 9-8-17

110

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

D 11 9-8-17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 51276

August 13, 2009 10:55:26 AM

Page 2

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Start Date: 8/13/09 Start Qty: 1.00

Required Date: 10/13/09 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

120



Skidtubes

Skidtubes

Memo

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

0.00

0.00

1 BE 09/08/17

130



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

⇒ 8/09/09/17

ⓧ 6

Work Order ID 51276

August 13, 2009 10:55:26 AM



Page 3

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Reference:

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

140

0.00



Skidtubes

Memo

0.00

Skidtubes

1-Weld step D2576 as per Dwg. D2580 and QSI 004
A/R□□□ Aluminum Rod

MID295

BE 09/08/17

2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI 004.

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill
A/R□□□ Aluminum Rod

MID295

BE 09/08/17

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64",
adjust stopper not to hit web. Deburr

5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580.
Deburr holes

BE 09/08/18

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Deburr

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Deburr

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D205-634-041 PAR #: NA Fault Category: Standstills NCR: (Yes) No DQA: U Date: 09-08-26
 Resolution: Re-weld Disposition: Re-weld QA: N/C Closed: J Date: 09-08-27

NCR: 51276		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
9/8/18	# 140.5	During Choresing the pilot broke causing the x-bolt space to have a hole in the side. Crossbolt 10th from aft	CP 09.08.18 Q51042	- inspect crossbolt counterbore tool & repair.	BF 09/08/18	S 09/08/18	CP 09.08.18 Q51042	S 09/08/18
				Drill out and remove the affected x-bolt space and replace D2575 BA 4B272	BF 09/08/18	S 09/08/18		
		R.C. Process.	CP 09.08.18	- new weld as per Q57004 AIR# 1110295 AND Built weld	BE 09/08/18	S 09/08/18	CP 09.08.18	S 09/08/18
				Re counter bore and deburr per Dwg.	BF 09/08/18	S 09/08/18		

NOTE: Date & initial all entries

Work Order ID 51276

August 13, 2009 10:55:26 AM



Page 4

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Reference:

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00	=> 508/08/18			(x) 1	/		
160 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00	=> 508/08/18			(x) 0	/		
170 HandFinish Hand Finishing	Pressure Wash per QSI005 4.3 Memo	0.00 0.00	=> 11 08/08/20			(x) 1	/		

Work Order ID 51276

August 13, 2009 10:55:26 AM

Page 5

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Start Date: 8/13/09 Start Qty: 1.00

Required Date: 10/13/09 Req'd Qty: 1.00

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start
StopSequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

M112260

0.00

⇒ 11/09/08/21

1 0

Powder Coating

START TIME:

11:30am

OVEN TEMPERATURE:

320°F

FINISH TIME:

12:00pm

190

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Bl 09-08-24

0

Quality Control

Work Order ID 51276

August 13, 2009 10:55:26 AM



Page 6

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Start Date: 8/13/09 Start Qty: 1.00



Cust Item ID:

Required Date: 10/13/09 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

200

0.00



HandFinish

Memo

0.00

Hand Finishing

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates
A/R ☐ ☐ ☐ Sikaflex-291 ☐ 112391 ☐ ☐ ☐
Sikaflex expire date: 10/20

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive
A/R ☐ ☐ ☐ Sikaflex-291 ☐ 112391 ☐ ☐ ☐
Sikaflex expire date: 10/20

5-Wing Walk as per Dwg D2580 and QSI 005 4.4
Batch: 11/12/06

10/20 09-08-24.

Work Order ID 51276

Page 7

August 13, 2009 10:55:26 AM

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Cust Item ID:

Required Date: 10/13/09 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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210

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

09/08/25

①

6

220

Packaging

0.00



Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPPD205-634-041

Location: PPD 50714

PPP Rev: _____

09/08/26

129/8/2001

230

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

PL 09-8225

Picklist Print

August 13, 2009 10:55:26 AM

Page 1

Work Order ID: 51276

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 8/13/09

Required Date: 10/13/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D2580-1RevD

Manufactured

No

110

Each

8.0000

1.0000



205 Skidtube bent detail

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

LG

6

50757

6

Main Warehouse

ST

2

50758

2

D2576-3RevG

Manufactured

No

140

Each

147.0000

1.0000



Step (maching detail)

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

147

43504

46

46661

101

B 50761

1 BE 09/08/07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

Picklist Print

August 13, 2009 10:55:26 AM

Work Order ID: 51276

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube



Comments:

Start Date: 8/13/09

Required Date: 10/13/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2579RevE		Manufactured	No			140	Each	92.0000	20.0000			
												
Crossbolt Spacer												

Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

ST

92

43988

4

46434

4

46956

2

47797

28

48272

54

D2855RevA

Manufactured No

200

Each

37.0000

1.0000



Cap



Warehouse
Location

Loc Qty

Loc Code

Main Warehouse

FP6

37

50513

37

20 BE 09/08/17

1 BK 09-08-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 3

August 13, 2009 10:55:26 AM

Work Order ID: 51276

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube


Comments:

Start Date: 8/13/09

Required Date: 10/13/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN3-5A  Bolt		Purchased	No			200	Each	2,540.000	2.0000			

Warehouse Loc Qty Loc Code

Location


Main Warehouse *M 111707*

ST 2540

100188 226

105057 2246

15205 68

AN960JD10L  Washer		Purchased	No			200	Each	6,733.000	2.0000			
--	--	-----------	----	--	--	-----	------	-----------	--------	--	--	--

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 6733

101291 16

104885 153

105793 236

109632 ✓ 1328

110985 5000

2. Bl 08-08-24

2 Bl 08-08-24

August 13, 2009 10:55:26 AM

Shop Packet Print

Page 3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Parent Item Name: Replacement Skidtube

Comments:

Start Date: 8/13/09

Required Date: 10/13/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
ALS7-1032-130		Purchased	No			200	Each	3,628.000	50.0000			



Insert

Warehouse Loc Qty Loc Code

Location

Main Warehouse M 110511

ST 3628

105855 16

108606 52

111529 1560

111779 2000

50. BL 09-08-24

AN3C4A

Purchased

No

200

Each

1,222.000

50.0000



BOLT

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 1222

112082 40

112314 ✓ 1182

50 BL 09-08-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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August 13, 2009 10:55:26 AM

Work Order ID: 51276

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube


Comments:

Start Date: 8/13/09

Required Date: 10/13/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960C10L  washer		Purchased	No			200	Each	3,764.000	50.0000			

Warehouse Loc Qty Loc Code
Location

OFFSHORE

FG 100

103585 100

Main Warehouse

ST 3664

112116 ✓ 3664

D3566-13RevC

Manufactured No



Gasket

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 29

45717 1

46889 2

48166 ✓ 10

50265 16

50 DR 07-08-24

1 DR 07-08-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Parent Item Name: Replacement Skidtube

Start Date: 8/13/09

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Comments:

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Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3566-5RevC		Manufactured	No			200	Each	4.0000	1.0000			
Gasket												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse	54260	
ST	4	
36113	1	
46186	1	
47318	1	
48167	1	

1 BR 09-08-24.

D3566-1RevC		Manufactured	No			200	Each	13.0000	2.0000			
Gasket												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	13	
46349	1	
47434	2	
48557	3	
51218	7	

51259

2 BR 09-08-24.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 7

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D3564-11RevD		Manufactured	No			200	Each	15.0000	1.0000			
												
Wearshoe												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	15	
45823	1	
48553	4	
50112 ✓	10	

D3564-13RevD		Manufactured	No			200	Each	39.0000	1.0000			
												
Wearshoe												

<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
FP17	24	
48554 ✓	2	
50270 ✓	22	
Main Warehouse		
ST	15	
45409	3	
46495	10	
47867	2	

1 Bl 02-08-24.

1 Bl 02-08-24

August 13, 2009 10:55:26 AM

Shop Packet Print

Page 7

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D3564-9RevD		Manufactured	No			200	Each	3.0000	1.0000			
												
Wearshoe												



Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 51258 3
44659 1
45825 1
48556 1

1 BR 09-08-24

D3564-5RevD		Manufactured	No			200	Each	6.0000	1.0000			
												
Wearshoe												

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG 51257 2
34806 2

1 BR 09-08-24

Main Warehouse

FP19 2
48555 2

Main Warehouse

ST 2
45824 1
47433 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Required Date: 10/13/09

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D2594-3RevC		Manufactured	No			200	Each	670.0000	16.0000			
												
O-Ring, 205 Skidtube												

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 670
27168 44
29908 ✓ 626

16 BR 09-08-24

D2594-1RevC		Manufactured	No			200	Each	476.0000	16.0000			
												
Plug, 205 Skidtube												

Warehouse Loc Qty Loc Code
Location

Main Warehouse

ST 476
42221 16
42807 92
43884 3
46435 2
47251 ✓ 363

16 BR 09-08-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART**RELEASED**
07-06-28

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2580	REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY SCALE NTS	
A	96.09.16	NEW ISSUE	
B	96.12.02	AS MANUFACTURED	
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

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WORK ORDER
NO. 51276

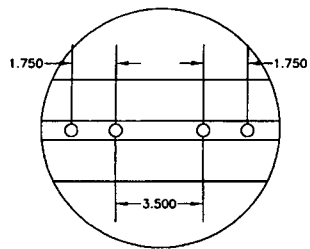
GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL $\varnothing 0.297$ HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:
SEE NOTES ON
PAGE 2 FOR D2580-041 AND
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

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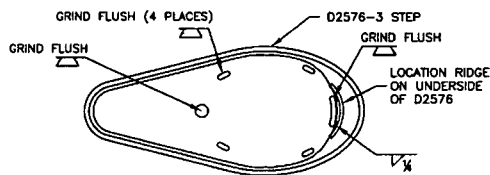
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DETAIL A
SCALE 5:24

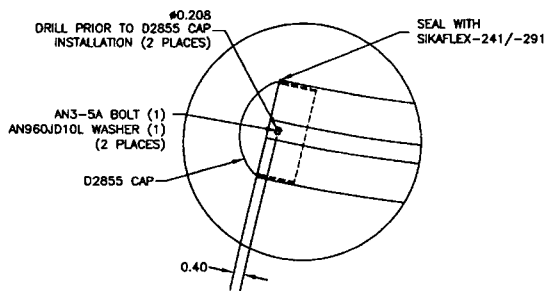


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07-06-28-11

DETAIL B
SCALE 5:24

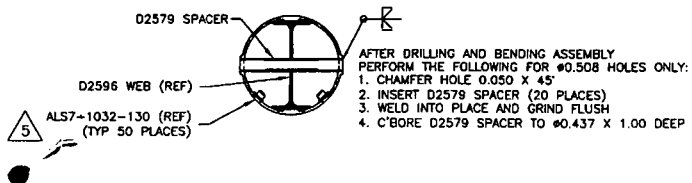


DETAIL C
SCALE 5:24



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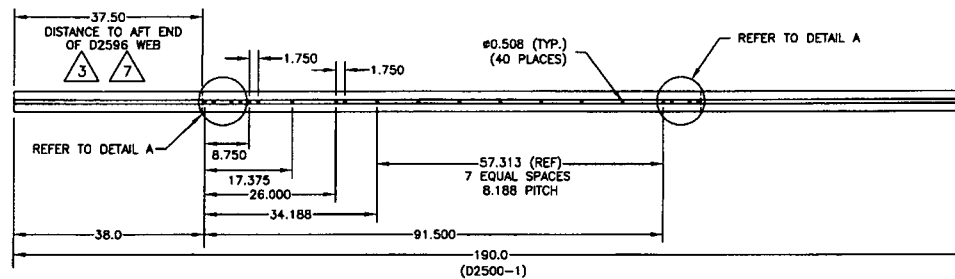
SECTION D-D
SCALE 5:24



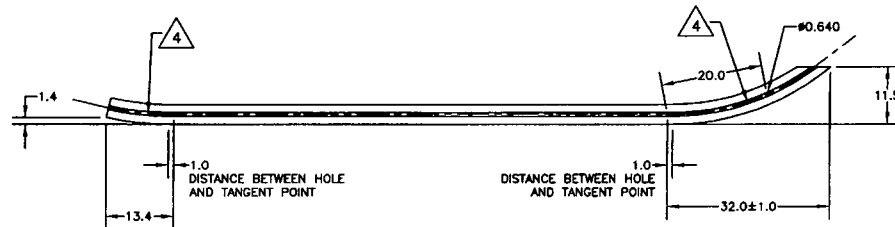
D2580-041 NOTES

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

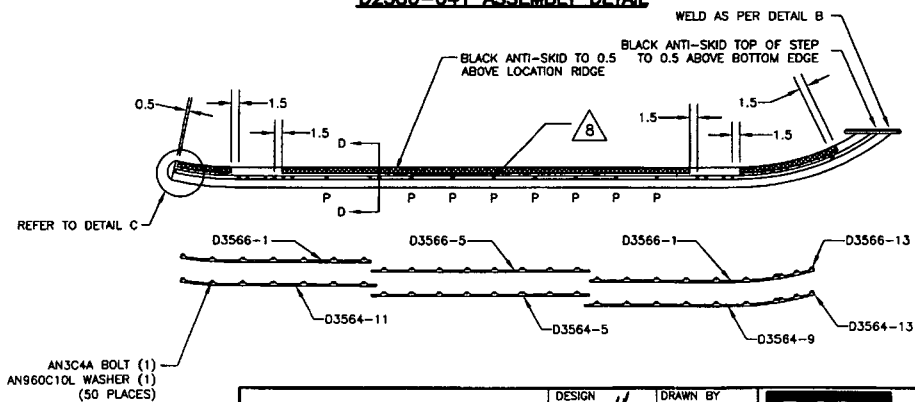
D2580-1 DRILLING DETAIL



D2580-1 BENDING AND CUTTING DETAIL







D2580-041 ASSEMBLY DETAIL



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DESIGN		DRAWN BY	
CHECKED		APPROVED	
DATE			
07.02.27			

DART		DART AEROSPACE LTD. MARKHAM, ONTARIO, CANADA	
DRAWING NO. D2580		REV. D SHEET 2 OF 3	
TITLE 205 SKIDTUBE ASSEMBLY		SCALE 1:24	

RELEASED
07 Dec 28

Diagram illustrating the grinding locations for the D2576-3 step. The diagram shows a cross-section of the step with the following labels:

- GRIND FLUSH (4 PLACES)
- GRIND FLUSH
- D2576-3 STEP
- GRIND FLUSH
- LOCATION RIDGE ON UNDERSIDE OF D2576
- $\frac{1}{8}$

Diagram illustrating the assembly of a circular component, likely a propeller hub, showing the following components and dimensions:

- #0.208**: Dimension for the hole diameter.
- DRILL PRIOR TO D2855 CAP INSTALLATION (2 PLACES)**: Instruction for drilling two locations.
- SEAL WITH SIKAFLEX-241/-291**: Instruction for applying sealant.
- AN3-SA BOLT (1)**: One AN3-SA bolt is shown.
- AN960J10L WASHER (1)**: One AN960J10L washer is shown.
- (2 PLACES)**: Dimension for the distance between two locations.
- D2855 CAP**: The cap being installed.
- SEE NOTE ii)**: Reference to a note.
- 0.40**: Dimension for the thickness of the component.

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AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR #0.508 HOLES ONLY:

1. CHAMFER HOLE $0.050 \times 45^\circ$
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO $\phi 0.437 \times 1.00$ DEEP

i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

ii) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE
WITH THE SPACER AT THIS LOCATION

37.50
DISTANCE TO AFT END
OF D2598 WEB

3
7

1.750 1.750

0.508 (TYP.)
(40 PLACES)

REFER TO DETAIL E

REFER TO DETAIL A

8.750

17.375

26.000

34.188

57.313 (REF)
7 EQUAL SPACES
8.188 PITCH

38.0

91.500

190.0
(D2500-1)

(MAKE FROM D2580-1 DRILLING DETAIL)

5.985

51.340

39.580

5.915

5.338 (REF)

3.630 (REF)

0.508 (8 PLACES)

20.0

0.640

1.4

1.0

1.0

13.4

32.0 ± 1.0

11

4

4


DISTANCE BETWEEN HOLE AND TANGENT POINT

DISTANCE BETWEEN HOLE AND TANGENT POINT

[illegible]

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 DART AEROSPACE LTD. WAINIKESBURY, ONTARIO, CANADA	
DRAWING NO.	REV
D2580	SHEET 3 OF 3
TITLE	
205 SKIDTUBE ASSEMBLY	

NO. 206

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliott
Job number: 50844
Part number: D205 634 041
Description: 205 skid tube
Welding Process: Tig [] Mig []
Base material: Aluminum
Current: AC [] DC []

TEST REQUIREMENTS AND RESULTS

Visual: pass [☒] fail []
Penetration: pass [☒] fail []

UNACCEPTABLE

Cracks: pass [☒] fail []
Undercut: pass [☒] fail []
Pin holes: pass [☒] fail []
Overlap (cold lap): pass [☒] fail []
Porosity (surface): pass [☒] fail []
Coloration: pass [☒] fail []

Qualifier [Signature] Date of Test Coupon 09.08.13

Welder Barclay Elliott Date of Test Coupon 09.08.13

The above named individual is qualified in accordance with AWS D17.1.2001 to weld